

REMARKS

STATUS OF THE CLAIMS

In accordance with the foregoing, claims 1 and 3 have been amended. Claims 1-4 are pending and under consideration.

No new matter is being presented, and approval of the amended claims is respectfully requested.

REJECTION OF CLAIM 1 UNDER 35 U.S.C. §102(b) AS BEING ANTICIPATED BY IWATA ET AL. (U.S. PATENT NO. 5,862,056)

The rejection of claim 1 is respectfully traversed and reconsideration is requested.

Independent claim 1, for example, of the present invention recites storage means for storing a command program describing movement amounts or positional information of controlled axes commanded in association with axis numbers of the controlled axes; and program analyzing means for analyzing and decoding the command program into the movement amounts or positional information of the axes, wherein the plurality of controlled axes are controlled according to the movement amounts or positional information analyzed by the program analyzing means.

According to an embodiment of the present invention, an axis number is assigned to a plurality of controlled axes, so that a single axis address command can be used to designate the movement amount of the plurality of controlled axes. Further, it is possible to express the controlled axis numbers in terms of variables and operational expressions. As a result, the command program can be shortened and simplified, so that it is easily changed when necessary. (See page 5, lines 4-12 of the Specification).

In contrast, Iwata et al. (hereinafter "Iwata") discloses a numerical control machining apparatus, having a section for reading out and analyzing machining programs from a storage section to control axes. However, in Iwata, a symbol creation section reads out an applicable axis movement symbol from an axis movement symbol storage section 14, and outputs the symbol to the display control section 3. Various kinds of symbols, such as arrows, are stored in the axis movement symbol storage section 14. (See column 3, lines 45-55).

Therefore, Iwata does not teach or even suggest storage means for storing a command program describing movement amounts or positional information of controlled axes commanded *in association with axis numbers* of the controlled axes, as recited in claim 1. (Emphasis added).

Accordingly, the apparatus of Iwata is incapable of controlling a plurality of axes with a command, since the controlled axes are not commanded in association with axis numbers of the controlled axes.

Therefore, it is respectfully submitted that claim 1 patentably distinguishes over Iwata.

REJECTION OF CLAIMS 2-4 FOR OBVIOUSNESS UNDER 35 U.S.C. §103(a) AS BEING UNPATENTABLE OVER IWATA ET AL. IN VIEW OF HOSOKAWA (JP 11-143511)

Claim 2 depends from claim 1 and inherits the patentable recitations thereof. Thus, it is respectfully submitted that claim 2 patentably distinguishes over Iwata.

Independent claim 3 recites storage means for storing correspondences between axis addresses designating the controlled axes and controlled axis numbers; and controlled axis number obtaining means for obtaining the controlled axis numbers from the axis addresses written in the command program, based on the correspondences stored in the storage means, wherein the plurality of controlled axes are controlled based on the controlled axis numbers obtained from the controlled axis number obtaining means.

Thus, for at least the reasons provided above for independent claim 1, it is respectfully submitted that independent claim 3 patentably distinguishes over Iwata. It is further submitted that Hosokawa does not teach or suggest all of the features of independent claims 1 and 3.

Claim 4 depends from claim 3 and inherits the patentable recitations thereof. Thus, it is respectfully submitted that dependent claim 4 patentably distinguishes over the prior art.

Furthermore, in the virtual numerical controller interface means 13 of Hosokawa, controlled axis data is obtained and stored in the "AxisNo" and "Axis Name []" variables, respectively. ([0059]). "AxisNo" is stored with the total number of axes to be controlled. For example, if the X-axis, Y-axis and Z-axis are controlled, the number three (3) is stored in "AxisNo". "Axis Name []" is a variable in which an axis name, such as "X", "Y" or "Z" is stored. Therefore, Neither "AxisNo" nor "Axis Name []" is a variable in which a *controlled axis number* is stored.

CONCLUSION

In accordance with the foregoing, it is respectfully submitted that all outstanding objections and rejections have been overcome and/or rendered moot. Further, all pending claims patentably distinguish over the prior art. There being no further outstanding objections or rejections, it is submitted that the application is in condition for allowance. An early action to that

effect is courteously solicited.

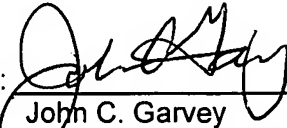
Finally, if there are any formal matters remaining after this response, the Examiner is requested to telephone the undersigned to attend to these matters.

If there are any additional fees associated with filing of this Amendment, please charge the same to our Deposit Account No. 19-3935.

Respectfully submitted,

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